SEQUENCE LISTING

<110> McMichael, Andrew
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      Smith, Geoffrey L.
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<120> Methods and Reagents for Vaccination
   Which Generate A CD8 T Cell Immune Response

<130> 2907.1000-000

<140> US 09/454,204
<141> 1999-12-09

<150> PCT/GB98/01681
<151> 1998-06-09

<150> GB 97 11957.2
<151> 1997-06-09

<160> 78

<170> FastSEQ for Windows Version 4.0

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<400> 1
aagccgaacg acaagtcctt gtat   24

<210> 2
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<400> 2
Lys Pro Asn Asp Lys Ser Leu Tyr
 1   5

<210> 3
<211> 24
<212> DNA

<213> Unknown

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<223> CTL Epitope of the Malaria String

<400> 3
aaacctaagg acgaattgga ctac   24

<210> 4
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<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 4
Lys Pro Lys Asp Glu Leu Asp Tyr
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<400> 5
aagccaatcg ttcaatacga caacttc   27

<210> 6
<211> 9
<212> PRT
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<220>
<223> CTL Epitope of the Malaria String

<400> 6
Lys Pro Ile Val Gln Tyr Asp Asn Phe
 1   5

<210> 7
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<400> 7
gcctccaaga acaaggaaaa ggctttgatc atc   33

<210> 8
<211> 11
<212> PRT

<213> Unknown

<220>
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<400> 8
Ala Ser Lys Asn Lys Glu Lys Ala Leu Ile Ile
 1   5   10

<210> 9
<211> 27
<212> DNA
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 9
ggtatcgctg gtggtttggc cttgttg   27

<210> 10
<211> 9
<212> PRT
<213> Unknown

<220>
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<400> 10
Gly Ile Ala Gly Gly Leu Ala Leu Leu
 1   5

<210> 11
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<212> DNA
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<400> 11
atgaacccta atgacccaaa cagaaacgtc   30

<210> 12
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<220>
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Met Asn Pro Asn Asp Pro Asn Arg Asn Val
 1   5   10

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<220>
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<400> 13
atgatcaacg cctacttgga caagttg   27

<210> 14
<211> 9
<212> PRT
<213> Unknown

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<400> 14
Met Ile Asn Ala Tyr Leu Asp Lys Leu
 1   5

<210> 15
<211> 24
<212> DNA
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<220>
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<400> 15
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<210> 16
<211> 8
<212> PRT
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<220>
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<400> 16
Ile Ser Lys Tyr Glu Asp Glu Ile
 1   5

<210> 17
<211> 27
<212> DNA
<213> Unknown

<220>
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<400> 17
tcctacatcc catctgccga aaagatc   27

<210> 18
<211> 9
<212> PRT
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<220>
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<400> 18
Ser Tyr Ile Pro Ser Ala Glu Lys Ile
 1   5

<210> 19
<211> 27
<212> DNA
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<220>
<223> CTL Epitope of the Malaria String

<400> 19
cacttgggta acgttaagta cttggtt   27

<210> 20
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 20
His Leu Gly Asn Val Lys Tyr Leu Val
 1   5

<210> 21
<211> 24
<212> DNA
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<220>
<223> CTL Epitope of the Malaria String

<400> 21
aagtctttgt acgatgaaca catc   24

<210> 22
<211> 8
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 22
Lys Ser Leu Tyr Asp Glu His Ile
 1   5

<210> 23
<211> 27
<212> DNA
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<220>
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<400> 23
ttattgatgg actgttctgg ttctatt   27

<210> 24
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 24
Leu Leu Met Asp Cys Ser Gly Ser Ile
 1   5

<210> 25
<211> 48
<212> DNA
<213> Unknown

<220>
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<400> 25
aacgctaatc caaacgcaaa tccgaacgcc aatcctaacg cgaatccc   48

<210> 26
<211> 16
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 26
Asn Ala Asn Pro Asn Ala Asn Pro Asn Ala Asn Pro Asn Ala Asn Pro
 1   5   10   15

<210> 27
<211> 60
<212> DNA
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 27
gacgaatggt ctccatgttc tgtcacttgt ggtaagggta ctcgctctag aaagagagaa 60

<210> 28
<211> 20
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 28
Asp Glu Trp Ser Pro Cys Ser Val Thr Cys Gly Lys Gly Thr Arg Ser
1   5   10   15
Arg Lys Arg Glu
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<210> 29
<211> 27
<212> DNA
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 29
tacttgaaca aaattcaaaa ctctttg   27

<210> 30
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 30
Tyr Leu Asn Lys Ile Gln Asn Ser Leu
1   5

<210> 31
<211> 27
<212> DNA
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 31
atggaaaagt tgaaagaatt ggaaaag   27

<210> 32
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 32
Met Glu Lys Leu Lys Glu Leu Glu Lys
 1   5

<210> 33
<211> 24
<212> DNA
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 33
gctacttctg tcttggctgg tttg   24

<210> 34
<211> 8
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 34
Ala Thr Ser Val Leu Ala Gly Leu
 1   5

<210> 35
<211> 48
<212> DNA
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 35
gacccaaacg ctaacccaaa cgttgaccca aacgccaacc caaacgtc   48

<210> 36
<211> 16
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 36
Asp Pro Asn Ala Asn Pro Asn Val Asp Pro Asn Ala Asn Pro Asn Val
 1   5   10   15

<210> 37
<211> 42
<212> DNA
<213> Unknown

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<220>
<223> CTL Epitope of the Malaria String

<400> 37
caagttcact tccaaccatt gcctccggcc gttgtcaagt tg                    42

<210> 38
<211> 14
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 38
Gln Val His Phe Gln Pro Leu Pro Pro Ala Val Val Lys Leu
 1               5                   10

<210> 39
<211> 42
<212> DNA
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 39
caattcatca aggccaactc taagttcatc ggtatcaccg aa                    42

<210> 40
<211> 14
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of the Malaria String

<400> 40
Gln Phe Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu
 1               5                   10

<210> 41
<211> 229
<212> PRT
<213> Unknown

<220>
<223> Complete Epitope of Malaria String

<400> 41
Met Ile Asn Ala Tyr Leu Asp Lys Leu Ile Ser Lys Tyr Glu Asp Glu
 1               5                   10                  15
Ile Ser Tyr Ile Pro Ser Ala Glu Lys Ile Gly Ser Lys Pro Asn Asp
                20                  25                  30
Lys Ser Leu Tyr Lys Pro Lys Asp Glu Leu Asp Tyr Lys Pro Ile Val
            35                  40                  45
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Gln Tyr Asp Asn Phe Gly Ser Ala Ser Lys Asn Lys Glu Lys Ala Leu
    50              55              60
Ile Ile Gly Ile Ala Gly Gly Leu Ala Leu Leu Met Asn Pro Asn Asp
65              70              75              80
Pro Asn Arg Asn Val Gly Ser His Leu Gly Asn Val Lys Tyr Leu Val
            85              90              95
Lys Ser Leu Tyr Asp Glu His Ile Leu Leu Met Asp Cys Ser Gly Ser
            100             105             110
Ile Gly Ser Asp Pro Asn Ala Asn Pro Asn Val Asp Pro Asn Ala Asn
            115             120             125
Pro Asn Val Gln Val His Phe Gln Pro Leu Pro Pro Ala Val Val Lys
    130             135             140
Leu Gln Phe Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Gly
145             150             155             160
Ser Tyr Leu Asn Lys Ile Gln Asn Ser Leu Met Glu Lys Leu Lys Glu
            165             170             175
Leu Glu Lys Ala Thr Ser Val Leu Ala Gly Leu Gly Ser Asn Ala Asn
            180             185             190
Pro Asn Ala Asn Pro Asn Ala Asn Pro Asn Ala Asn Pro Asp Glu Trp
    195             200             205
Ser Pro Cys Ser Val Thr Cys Gly Lys Gly Thr Arg Ser Arg Lys Arg
    210             215             220
Glu Gly Ser Gly Lys
225
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<210> 42
<211> 8
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 gp41

<400> 42
Tyr Leu Lys Asp Gln Gln Leu Leu
 1               5


<210> 43
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 gp41

<400> 43
Glu Arg Tyr Leu Lys Asp Gln Gln Leu
 1               5


<210> 44
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of SIV env
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<400> 44
Glu Ile Thr Pro Ile Gly Leu Ala Pro
 1   5

<210> 45
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 p24

<400> 45
Pro Pro Ile Pro Val Gly Glu Ile Tyr
 1   5

<210> 46
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 p24

<400> 46
Gly Glu Ile Tyr Lys Arg Trp Ile Ile
 1   5

<210> 47
<211> 10
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 p24

<400> 47
Lys Arg Trp Ile Ile Leu Gly Leu Asn Lys
 1   5   10

<210> 48
<211> 10
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 p24

<400> 48
Ile Ile Leu Gly Leu Asn Lys Ile Val Arg
 1   5   10

<210> 49
<211> 10

<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 p24

<400> 49
Leu Gly Leu Asn Lys Ile Val Arg Met Tyr
 1   5   10

<210> 50
<211> 8
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of SIV env

<400> 50
Tyr Asn Leu Thr Met Lys Cys Arg
 1   5

<210> 51
<211> 10
<212> PRT
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<220>
<223> CTL Epitope of HIV-1 gp120

<400> 51
Arg Gly Pro Gly Arg Ala Phe Val Thr Ile
 1   5   10

<210> 52
<211> 9
<212> PRT
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<400> 52
Gly Arg Ala Phe Val Thr Ile Gly Lys
 1   5

<210> 53
<211> 9
<212> PRT
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<220>
<223> CTL Epitope of HIV-1 gag

<400> 53
Thr Pro Tyr Asp Ile Asn Gln Met Leu
 1   5

<210> 54
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of SIV gag

<400> 54
Cys Thr Pro Tyr Asp Ile Asn Gln Met
 1   5

<210> 55
<211> 11
<212> PRT
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<220>
<223> CTL Epitope of HIV-1 nef

<400> 55
Arg Pro Gln Val Pro Leu Arg Pro Met Thr Tyr
 1   5   10

<210> 56
<211> 10
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 nef

<400> 56
Gln Val Pro Leu Arg Pro Met Thr Tyr Lys
 1   5   10

<210> 57
<211> 8
<212> PRT
<213> Unknown

<220>
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<400> 57
Val Pro Leu Arg Pro Met Thr Tyr
 1   5

<210> 58
<211> 9

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<212> PRT
<213> Unknown

<220>
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<400> 58
Ala Val Asp Leu Ser His Phe Leu Lys
 1               5


<210> 59
<211> 9
<212> PRT
<213> Unknown

<220>
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<400> 59
Asp Leu Ser His Phe Leu Lys Glu Lys
 1               5


<210> 60
<211> 8
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 nef

<400> 60
Phe Leu Lys Glu Lys Gly Gly Leu
 1               5


<210> 61
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 pol

<400> 61
Ile Leu Lys Glu Pro Val His Gly Val
 1               5


<210> 62
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<212> PRT
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<220>
<223> CTL Epitope of HIV-1 pol
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<400> 62
Ile Leu Lys Glu Pro Val His Gly Val Tyr
 1   5   10

<210> 63
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Epitope of HIV-1 pol

<400> 63
His Pro Asp Ile Val Ile Tyr Gln Tyr
 1   5

<210> 64
<211> 9
<212> PRT
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<220>
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<400> 64
Val Ile Tyr Gln Tyr Met Asp Asp Leu
 1   5

<210> 65
<211> 45
<212> PRT
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<400> 65
Met Leu Pro Tyr Leu Gly Trp Leu Val Phe Ala Gln His Pro Asn Ala
 1   5   10   15
Glu Leu Leu Lys His Tyr Leu Phe Arg Asn Leu Ser Pro Ser Tyr Val
            20   25   30
Tyr His Gln Phe Ile Pro Asn Pro Leu Leu Gly Leu Asp
        35   40   45

<210> 66
<211> 9
<212> PRT
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<223> CTL Peptide Epitope of P1 Tumour Antigen

<400> 66
Leu Pro Tyr Leu Gly Trp Leu Val Phe
 1   5

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<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Peptide Epitope of P. berghei CSP

<400> 67
Ser Tyr Ile Pro Ser Ala Glu Lys Ile
 1               5


<210> 68
<211> 10
<212> PRT
<213> Unknown

<220>
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<400> 68
Arg Gly Pro Gly Arg Ala Phe Val Thr Ile
 1               5                   10


<210> 69
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Peptide Epitope of E. coli b-galactosidase

<400> 69
Thr Pro His Pro Ala Arg Ile Gly Leu
 1               5


<210> 70
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Peptide Epitope of Influenza A Virus NP

<400> 70
Thr Tyr Gln Arg Thr Arg Ala Leu Val
 1               5


<210> 71
<211> 8
<212> PRT
<213> Unknown
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<220>
<223> CTL Peptide Epitope of Influenza A Virus NP

<400> 71
Ser Asp Tyr Glu Gly Arg Leu Ile
 1   5

<210> 72
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Peptide Epitope of Influenza A Virus NP

<400> 72
Ala Ser Asn Glu Asn Met Glu Thr Met
 1   5

<210> 73
<211> 9
<212> PRT
<213> Unknown

<220>
<223> CTL Peptide Epitope of P. falciparum TRAP

<400> 73
Ile Asn Val Ala Phe Asn Arg Phe Leu
 1   5

<210> 74
<211> 33
<212> DNA
<213> Unknown

<220>
<223> 5' Primer MamuNdeI

<400> 74
cctgactcag accatatggg ctctcactcc atg   33

<210> 75
<211> 85
<212> DNA
<213> Unknown

<220>
<223> 3' Primer MamuNdeI

<400> 75
gtgataagct taacgatgat tccacaccat tttctgtgca tccagaatat gatgcaggga 60
tccctcccat ctcagggtga ggggc   85

<210> 76
<211> 27

<212> DNA
<213> Unknown

<220>
<223> Primer B2MBACK

<400> 76
tcagaccata tgtctcgctc cgtggcc   27

<210> 77
<211> 31
<212> DNA
<213> Unknown

<220>
<223> Primer B2MFOR

<400> 77
tcagacaagc ttttacatgt ctcgatccca c   31

<210> 78
<211> 11
<212> PRT
<213> Unknown

<220>
<223> tr57 Target Epitope from TRAP

<400> 78
Lys Thr Ala Ser Cys Gly Val Trp Asp Glu Trp
 1   5   10